

**Supplemental Specification
2005 Standard Specification Book**

SECTION 01455

MATERIAL QUALITY REQUIREMENTS

Delete Section 01455 in its entirety and replace with the following:

PART 1 GENERAL

1.1 RELATED SECTIONS

- A. Section 01355: Environmental Protection

1.2 REFERENCES

- A. UDOT Materials Manual of Instruction Part 8
- B. UDOT Minimum Sampling and Testing Requirements
- C. U. S. Code of Federal Regulations

1.3 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

- A. Use only materials that meet contract requirements.
- B. Notify the Engineer in writing of the proposed source of materials to be used before their delivery.
- C. Correct or remove materials that fail to meet contract requirements.
- D. Use new materials for the work unless otherwise specified.
- E. Pay all related costs, including those for haul distance and for exploring and developing sources.

1.4 DEPARTMENT FURNISHED MATERIALS SOURCES

- A. Possible sources of local optional materials may be available.
 - 1. Determine the amount of equipment and work required to produce a material meeting the specifications using these sources.

2. Expect variations in quantity and quality.
 3. Material may be rejected if it is unacceptable or does not meet contract requirements.
- B. Specific information about the location of possible sources is available at the Region Materials Lab.
1. By making this information available, the Department does not represent that a bidder should expect to produce materials corresponding with those previously produced by others, or that the Contractor may expect to produce acceptable materials based upon the interpretation of information, including any quality test information.
- C. Perform required quality tests using a laboratory qualified by UDOT. Submit copies of test reports to Engineer.
1. The Engineer may require additional samples for inspection and testing before authorizing use of the material.
 2. Obtain Engineer's written approval to use material based on Contractor's quality test results.
- D. Prepare materials site plans that show in detail the line and grades to which materials are to be removed.
1. Obtain Engineer's written approval of the materials site plans before removing any material.
- E. Strip and stockpile topsoil before removing any materials.

1.5 CONTRACTOR FURNISHED MATERIALS SOURCES

- A. Obtain required Environmental Clearances. Refer to Section 01355.
- B. Acquire the rights to remove materials and enter into agreement with owner that specifies requirements for grading and reclamation after removing materials.
- C. Locate, where practical, borrow, gravel, and quarry materials sites where they are not visible from the highway.
- D. Perform required quality tests using a laboratory qualified by UDOT. Submit copies of test reports to Engineer.
1. The Engineer may require additional samples for inspection and testing before authorizing use of the material.
 2. Material may be rejected if it is unacceptable or does not meet contract requirements.

- E. Prepare materials site plans that show in detail the line and grades to which materials are to be removed.
 - 1. Obtain Engineer's approval of the materials site plans before removing any materials.
- F. Strip and stockpile topsoil before removing any materials.

1.6 FINISHING MATERIAL SOURCE SITES

- A. Finish all (public and private) material source sites to the satisfaction of the Engineer.
- B. Grade to drain without causing excessive erosion and without altering the natural drainage courses.
- C. Locate waste sites in areas that are least visible from public view. Spread waste material to obtain a natural appearance.
- D. Remove trash. Remove, bury or distribute excess materials over the disturbed areas when excavation has been completed.
- E. Perform required grading and reclamation, as required under the agreement with the property owner, when removal of material is complete and before spreading topsoil.
 - 1. Avoid vertical cuts and sharp corners.
 - 2. Grade side slopes to achieve a natural appearance.
 - 3. Abandon and obliterate haul roads.
- F. Spread topsoil over the excavated area disturbed by construction operations, including obliterated haul roads, and seed all areas with grass or grasses adaptable to the area and approved by the Engineer and property owner. Perform seeding under the contract requirements for seeding, including mulching.
- G. Finishing local material source sites, including seeding and mulching, is not measured or paid for separately and is considered incidental to other items of work.
- H. Before final acceptance, provide the Engineer with a written release from the property owner indicating that all conditions of the agreement are satisfied.

1.7 SAMPLES, TESTS, AND REFERENCED CITED SPECIFICATIONS

- A. Incorporate into the work only material that is inspected, tested, and accepted by the Department. Pay to remove unacceptable materials from the site, at no expense to the Department.
- B. The Department uses the most current Minimum Sampling and Testing Requirements, Materials Manual of Instruction Part 8, and AASHTO or ASTM standards.
- C. The Department performs acceptance testing at its expense, unless otherwise designated.
- D. The Department may inspect, test, and reject materials at any time.
 - 1. Copies of any or all test results are available upon request.
- E. The Department does not allow any extension of contract time for, or as a result of, any testing.
- F. Pay for retesting of materials made necessary by the Contractor's activities.
- G. All Department and Consultant/Contractor materials laboratories and materials test technicians must be qualified under the requirements of the UDOT Materials Manual of Instruction Part 8, to perform material sampling and testing.

1.8 CERTIFICATE OF COMPLIANCE

- A. The Contract or the UDOT Minimum Sampling and Testing Requirements designate manufactured materials and assemblies that can be incorporated in the work, if accompanied by certificates of compliance from the manufacturer.
 - 1. Clearly identify each lot of certified materials or assemblies delivered to the work, and make certain the certificate of compliance accompanies each delivery and identifies the specification requirement satisfied.
 - 2. Make certain the certificates of compliance state the material or assemblies comply with applicable requirements of the Contract, and are signed by a manufacturer's representative in a position to legally bind the manufacturer.
 - a. Photocopies, faxes, and electronically submitted PDF files are acceptable.
- B. The Department may sample and test materials or assemblies used on the basis of certificates of compliance and reject if determined not to meet contract requirements.

- C. Obtain the required certificate of compliance form from the Engineer.

1.9 PLANT INSPECTION

- A. Department may inspect materials at the acquisition or manufacturing source for compliance with specified manufacturing methods. The Department obtains and tests material samples for compliance with quality requirements.
- B. Cooperate fully and assist the Engineer during the inspection.
 - 1. Allow the Engineer full access to all parts of the plant used to manufacture or produce materials.
 - 2. Provide and maintain adequate safety measures.
 - 3. Equip crushing or screening facilities with automatic or semiautomatic mechanical sampling devices.
- C. The Department rejects material not meeting contract requirements.

1.10 STORAGE AND HANDLING OF MATERIALS

- A. Store and handle materials to preserve their quality and fitness for the work.
- B. Transport bulk materials in a manner to prevent loss or segregation after loading and measuring.
- C. Store materials so they can be easily inspected and retested.
- D. Obtain approval from the Engineer to store materials or equipment within the right-of-way.
- E. Additional storage space is at the Contractor's expense and option.
 - 1. Obtain owner's or lessee's written permission before storing material on private property.
 - 2. Furnish copies of the permission to the Engineer, if requested.
- F. Pay to restore storage and plant sites to their original condition or to the satisfaction of the Engineer.

1.11 UNACCEPTABLE MATERIALS

- A. Engineer rejects all materials not meeting the contract requirements.
- B. Remove unacceptable materials immediately from the project site unless the defects are corrected and approved by the Engineer or accepted at a reduced price.

1.12 DEPARTMENT FURNISHED MATERIALS

- A. Deliver or make available Department furnished materials at the locations specified in the Contract. Receive, inventory, store, protect, distribute and install Department furnished material.
- B. Include the cost of handling and placing Department furnished materials in the contract price for the item for which the materials are used.
- C. Contractor is responsible for all materials received. The Department deducts from any monies due:
 - 1. For any shortages, deficiencies, and damage that may occur to the material after delivery.
 - 2. The demurrage charges resulting from failure to accept the material at the designated time and point of delivery.

1.13 BUY AMERICA

- A. Federal-aid projects are subject to Title 23, U. S. Code of Federal Regulations, Part 635.410, Buy America Requirements.
 - 1. Check the appropriate box on the bid proposal indicating the intent to use steel or iron or both of 100 percent domestic supply, or with some foreign supply.
 - 2. If neither box is checked, the Department considers the bid a bid for furnishing domestic steel and iron, and uses only domestic steel and iron in the Contract.
 - 3. The Department awards the Contract to the bidder who submits the lowest total contract bid based on furnishing domestic steel and iron unless the total contract bid exceeds the lowest total contract bid based on foreign steel and iron by more than 25 percent.
- B. To be considered domestic, all steel and iron used and all products manufactured from steel and iron must be produced in the United States.
 - 1. All manufacturing processes, including application of a coating, of these materials must occur in the United States.
 - 2. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. The material applied, as a coating is not covered under Buy America.
- C. If 100 percent steel and iron is furnished, provide a written certification that all contract items using steel and iron are of domestic supply.

- D. The above requirement does not preclude a minimal use of foreign material, provided the cost of material used does not exceed one-tenth of one percent (0.1 percent) of the total contract amount or \$2,500 whichever is greater.

1.14 CONVICT PRODUCED MATERIALS

- A. Federal-aid projects are subject to Title 23, U. S. Code of Federal Regulations, Part 635.417, Convict Produced Materials.
- B. Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:
 - 1. Produced by convicts who are on parole, supervised release, or probation from a prison, or
 - 2. Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facilities for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.

PART 2 PRODUCTS Not used

PART 3 EXECUTION Not used

END OF SECTION